

CLAIMS

- 5 1. An image capturing device comprising:
a housing;
an optoelectric transducer disposed in said housing, arranged to accept
an optical input via a light transmissive opening through said housing, and to
convert said optical input to an electrical signal;
10 an image processor disposed within said housing and electrically coupled
to said optoelectric transducer;
a handheld computing device disposed within said housing, coupled to
said image processor, and including:
a microprocessor,
15 memory coupled to said microprocessor,
a user interface,
an external computer interface, and
a display;
wherein said display, when switched from displaying computing device
20 information, displays an image regenerated at least in part by said
microprocessor from said electrical signal; and
wherein said user interface further comprises at least one
electromechanical activator, when switched from accepting computing device
instruction, adapted to accept a user instruction to save said electrical signal as
25 a stored image representation.
2. An image capturing device in accordance with claim 1 wherein said
user interface further comprises at least one electromechanical activator, when
switched from accepting computing device instruction, adapted to accept a user
30 instruction to couple a second electrical signal representative of said stored
image representation to said external computer interface of said handheld
computing device.

3. An image capturing device in accordance with claim 1 wherein said memory includes a computing device stored document and wherein said display further comprises a tactile input display adapted to accept a user input to
5 associate said stored image representation with said stored document.

4. An image capturing device comprising:
a housing;
an optoelectric transducer disposed in said housing, arranged to accept
10 an optical input via a light transmissive opening through said housing, and to convert said optical input to an electrical signal;
an image processor disposed within said housing and electrically coupled to said optoelectric transducer;
a memory coupled to said image processor:
15 a user interface; and
an integral interface connector coupled to said image processor and adapted to be coupled to an external computer without an intervening cable.

5. An image capturing device in accordance with claim 4 wherein said
20 user interface further comprises at least one electromechanical activator adapted to accept both a user instruction to turn the image capturing device on and to save said electrical signal as a stored image representation.

6. An image capturing device in accordance with claim 5 wherein said at
25 least one electromechanical activator further comprises an electromechanical activator recessed below an external surface of said housing.

7. An image capturing device in accordance with claim 5 wherein said user interface further comprises a second electromechanical activator adapted
30 to accept both a user instruction to review said stored image representation and to turn the image capturing device off.

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8. An image capturing device in accordance with claim 7 wherein said second electromechanical activator is further adapted to accept a momentary user instruction to review said stored image representation and to accept a continuous user instruction to turn the image capturing device off.

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9. An image capturing device in accordance with claim 5 wherein said user interface further comprises a third electromechanical activator adapted to accept a user instruction to delete said stored image representation.

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10. A method of capturing and integrating an image in a combined handheld computing and image capture device comprising the steps of:

determining a function of at least one electromechanical actuator;

launching an application program from a memory in the device, said application program unrelated to image capture;

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repurposing said at least one electromechanical actuator from said determined function to a shutter actuator function;

exposing an optoelectric transducer disposed in a housing of the device to light input via a light transmissive opening through said housing;

converting said light into an electrical signal;

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upon actuation of said repurposed at least one electromechanical actuator, processing and storing said electrical signal as an image representation in said memory; and

recalling said image representation for use in said launched application program.

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11. A method in accordance with the method of claim 10 further comprising the steps of pasting at least a portion of said recalled image into a document of said launched application program and recalling said image representation for presentation on a display of the device.

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12. A method of capturing and integrating an image in an image capture device comprising the steps of:

turning the image capture device on in response to a user's activation of a first electromechanical actuator;

5 exposing an optoelectric transducer disposed in a housing of the device to light input via a light transmissive opening through said housing;

converting said light into an electrical signal;

accepting a user instruction to said first electromechanical actuator to save said electrical signal as a stored image representation; and

10 recalling said image representation.

13. A method in accordance with the method of claim 12 further comprising the step of accepting a user instruction to said second electromechanical activator to review said stored image representation.

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14. A method in accordance with the method of claim 13 further comprising the step of accepting a user instruction to said second electromechanical activator to turn the image capturing device off.

20 15. A method in accordance with the method of claim 14 wherein said steps of accepting a user instruction to said second electromechanical activator to review said stored image representation and accepting a user instruction to said second electromechanical activator to turn the image capturing device off further comprises the steps of accepting a momentary user instruction to said
25 second electromechanical activator to review said stored image representation and accepting a continuous user instruction to turn the image capturing device off.

16. A method in accordance with the method of claim 12 further
30 comprising the step of accepting a user instruction to a third electromechanical activator to delete said stored image representation.

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